

AMENDMENTS TO THE CLAIMS

1. – 15. (Canceled)

16. (previously presented) The method of claim 20, wherein the sensor acquires MEG data.

17. (previously presented) The method of claim 20, wherein the sensor acquires EEG data.

18. (previously presented) The method of claim 20, wherein the sensor acquires ECG data.

19. (previously presented) The method of claim 20, wherein the sensor acquires MCG data.

20. (currently amended) A method of evaluation comprising:
acquiring an electromagnetic physiological signal with a sensor on a subject;
performing a source reconstruction of the electromagnetic physiological signal via a signal processing circuit in communication with said sensor, with said circuit being configured to support multiple parallel threads of execution with one thread being a measurement module and a second thread being a source reconstruction module;
using the source reconstruction to modify the acquisition of a new electromagnetic physiological signal; and

displaying source reconstruction results overlayed onto anatomical data of said patient.